

A. exilipes and *A. linaria*, as in the case of the Crows, *Corvus cornix* and *C. corone*, or else the distinctive points of the unstreaked white rump and the unstreaked lower tail-coverts do not always hold good in *A. exilipes*; or, again, they are of a distinct species intermediate between the two. I should hardly say "intermediate," for even at a hasty glance the very superior whiteness would proclaim them to be *A. exilipes*. A hybrid ought to be of really intermediate tone, but this bird is *A. exilipes* even to its small bill, and is quite as generally white.

Eggs of the different Redpolls in collections must be very doubtful indeed when collected in Greenland or North-east America, for the collectors may have taken those of *A. rostrata* for *A. hornemanni*; and again eggs from Northern Europe referred to *A. linaria* may be those of *A. exilipes*. Except when the parent bird is sent with the eggs, they should be put out of collections, and fresh ones with the old bird obtained. I expect the egg of *A. rostrata* will prove to be the largest of the lot: the bird is so sturdy-looking.

XXXVII.—*Notices of Recent Ornithological Publications.*

[Continued from p. 203.]

54. *Annals of the Natural-History Museum of Vienna.*

[Annalen des k. k. naturhistorischen Hofmuseums. Band i. Nr. 1, Jahresbericht für 1885 von Dr. Franz Ritter von Hauer. Wien: 1886.]

The first part of this new periodical contains a report by Dr. v. Hauer on the newly erected Museum of Natural History in Vienna and its various departments. Besides Zoology, Botany, and Mineralogy in Austria, they have wisely located Anthropology in the same building. The Birds in the new museum remain under the charge of our excellent friend and correspondent Herr August v. Pelzeln. The general mounted collection of this class is stated to contain 20,000 examples, besides which there is a separate series to illustrate the Ornis of the Austro-Hungarian empire, consisting of 621 specimens referable to 340 species.

55. *Bennett on Birds breeding in New South Wales.*

[Notes on the Habits, &c. of Birds breeding in the interior of New South Wales. By K. H. Bennett. Proc. Linn. Soc. N. S. W. x. p. 162.]

Mr. Bennett's present article relates to the habits of *Falco subniger* and *Glareola grallaria*. It appears that the former preys occasionally on *Elanus scriptus*, so that the old proverb "hawks not picking out hawks' een" does not hold good in Australia. The Falcon is apt to appropriate other birds' nests for breeding-purposes. The Pratincole deposits its eggs on the bare surface of the ground.

56. *W. Blasius on measuring Birds' Skeletons.*

[Osteologische Studien (Messungs-Methoden an Vogel-Skeletten). Von Prof. Dr. Wilh. Blasius. J. f. O. 1885, p. 409.]

Prof. Blasius, who has great experience in such matters, gives in detail what he considers to be the best and most useful measurements to be taken of the various bones of the skeletons of birds.

57. *W. Blasius on the Birds of Prey of Cochabamba.*

[Die Raubvögel von Cochabamba. Von Prof. Dr. Wilh. Blasius. Mitth. d. ornithol. Vereines in Wien, 1884, Nr. 9.]

The receipt of a collection of bird-skins from Prof. E. v. Boeck has enabled Prof. Blasius to make some additions and rectifications to the former's accounts of the Birds of Prey of Cochabamba, in Bolivia. A revised list of these birds, according to the nomenclature adopted by M. Taczanowski, is added. It contains 21 species.

58. *W. Blasius on Birds from Cochabamba.*

[Ueber einige Vögel von Cochabamba in Bolivia. (Nach brieflichen Mittheilungen der Herrn Prof. Eug. von Boeck.) Von Prof. Dr. Wilh. Blasius. J. f. O. 1885, p. 416.]

Prof. Blasius gives extracts from letters of Prof. E. v. Boeck of Cochabamba, which contain further information respecting *Psophia cantatrix* and other species of Prof. v. Boeck's list, and mention the occurrence of *Eurypyga helias* on the Mamoré.

f 59. *Boeck on the Birds of Cochabamba.*

[Ornis des Thales von Cochabamba in Bolivia und der nächsten Umgebung. Von Prof. Eugen von Boeck. Mit Anmerkungen von Prof. Dr. Wilh. Blasius. Mitth. d. ornithol. Vereines in Wien, 1884, Nr. 7, 11.]

The valley of Cochabamba lies among the Andes of Bolivia, at a height of 7000–8000 feet above the sea-level. After a prefatory account of its physical features and vegetation, Prof. v. Boeck gives a list of its native birds, with remarks upon them. The system adopted is that of the somewhat antiquated ‘Fauna Peruana’ of Tschudi, being the only one available to the author in his remote and isolated home. About 110 species are included in the list. *Phytotoma angustirostris* is a “very common and destructive bird” to the growing plants, which it nips off as they spring up. Its native name is “Coque,” because its mouth is green, like that of a coca-eating Indian. The splendid Humming-bird, *Cometes phaon*, is found in the valley, and also up to the height of 9000 feet in the surrounding Andes. *Rhea americana*, we are told, occurs in the Cordillera of Tacora, near Tacna. Can this be correct?

60. *Dresser’s Monograph of the Bee-eaters.*

[A Monograph of the Meropidæ, or Family of the Bee-eaters. By H. E. Dresser, F.L.S. Part V. Small folio. London: 1886.]

Mr. Dresser’s fifth number brings his monograph of the Bee-eaters to a successful conclusion. The whole family, as here arranged, contains 31 species divided into five genera. Every species is well figured by Keulemans, and the letter-press contains a summary of all that can be gathered together concerning a set of birds which are not generally very well known.

The fifth number contains figures of the following species:—

Nyctiornis amictus, jr.

Merops viridis.

— *muscatensis*.

Melittophagus gularis, jr.

Melittophagus bullocki.

— *boleslavskii*.

— *revoili*.

61. *Finsch and Meyer on Birds from New Guinea.*

[Vögel von Neu-Guinea, zumeist aus der Alpenregion am Südostabhange des Owen Stanley-Gebirges (Hufeisengebirge, 7000-8000' hoch), gesammelt von Karl Hunstein, bearbeitet von O. Finsch und A. B. Meyer. Zeitschr. f. d. ges. Ornithol. 1886, Heft i.]

This is the second and concluding portion of the article of the first part of which we have given above (pp. 237-258) a translation by the kind permission of the authors. The present portion treats of 69 species, mostly from the Horse-shoe Mountain, in the south-east confines of the Owen-Stanley range in New Guinea. Of these the following twelve are characterized as new to science:—*Psittacella pallida*, *P. madaraszi*, *Eos incondita*, *Charmosyna stellæ*, *Arses henkei*, *Rhipidura cinnamomea*, *Myzomela ramsayi*, *Melipotres fumigatus*, *Melidectes emilii*, *Ptilotis fulvocinerea*, *Ptilopus patruelis*, and *Eutrygon leucoparia*. All these birds are figured with the exception of *Psittacella pallida*, *Myzomela ramsayi*, and *Eutrygon leucoparia*. A figure is also given of the curious diminutive Cuckoo *Microdynamis parva* of Salvadori, with which E. P. Ramsay's *Rhamphomantis rollesi* (Proc. Linn. Soc. N. S. W. viii. p. 25) is said to be probably identical. The exact locality of the specimen is not stated.

62. *Hancock on the Cuckoo.*

[Note on the habit of the young Cuckoo in ejecting the Eggs and Young of its Foster-parent from the Nest, observed by John Hancock, at Oatlands, Surrey, in June 1884. Nat. Hist. Trans. of Northumb., Durham, and Newcastle-upon-Tyne, vol. viii.]

Mr. Hancock selected, as most convenient for observation, the nest of a Hedge-Accentor containing one Cuckoo's egg and four of those of the former. The process of ejection of the produce of the foster-parents was carefully watched, and was found to agree with the descriptions previously given by Jenner, Montagu, and Mrs. Blackburn. Mr. Hancock expresses his surprise at the remark of a recent writer who says that "one feels inclined to class these narratives with the equally well-authenticated stories of ghosts and other apparitions which abound." Mr. Hancock says that no ornithological

thologist has yet been able to answer satisfactorily the questions as to the sex which utters the well-known note, as to the time of moulting of the young Cuckoo, and as to the way in which the Cuckoo arrives at a knowledge of the time when she must place her egg in the nest selected for her purpose.

63. *Kingsley's 'Standard Natural History.'*

[*'The Standard Natural History,'* edited by John Sterling Kingsley. Vol. iv. Birds. Boston: S.E. Cassino and Co., 1885.]

Those who wish to make themselves acquainted with the most "advanced" views on the classification of birds should devote their attention to the fourth volume of Kingsley's '*Standard Natural History.*' The '*Natural History of Birds*' is stated to have been prepared by "Walter B. Barrows, Daniel G. Elliot, Leonard Stejneger, Ph.D., and J. S. Kingsley, D.Sc." But it will not be difficult for any one acquainted with the writings of modern ornithologists to see at a glance which of these four gentlemen has had the greater share in its preparation, and under whose guidance the whole has been shaped into its present form. It would have been much better to have added to the "contents" the name of the author of each division, which can only be ascertained by a hunt for the signature that is attached to each succeeding portion. There, however, can be no question that the volume, as a whole, may be attributed to Dr. Stejneger, and great credit is due to him for its preparation. No work issued in Europe contains such a good general account of the Class of Birds according to the most recent researches of naturalists, and brings one into acquaintance with the newest discoveries in this group of vertebrates. In making a few critical remarks, as we turn over its pages, we are influenced by the hope that these points will receive attention in the preparation of the second edition of the '*Standard Natural History of Birds,*' which which will assuredly be called for.

The authors commence at the lower end of the series of birds, and treat first of the "*Saururæ*," "*Odontormæ*," and "*Odontoholcæ*," as these three extinct subclasses are de-

nominated, leaving modern birds to the fourth subclass "Eurhipiduræ" of Gill, so-called in contradistinction to "Saururæ," from their fan-like tail. The Eurhipiduræ are subdivided into three "superorders," Dromæognathæ, Impennes, and Euornithes. The Tinamoos are annexed to the Struthiones in the first of these. It is, however, we think, hardly justifiable to use Prof. Huxley's term "Dromæognathæ," intended for the Tinamoos only, in this extended sense: it would be even better, in our opinion, to retain the term "Struthiones" for the group thus constituted. The name "Ratitæ" is of course no longer applicable to a division in which the Tinamoos are included. That the authors are right in the important rank thus conferred on the Penguins, we are firmly convinced. The Penguins cannot be descendants of ancestors that ever had normal bird's wings, and must be kept quite apart from the typical birds. But whether it is justifiable to include the Tinamoos in the same primary division as the Struthiones, and to raise the Penguins to exactly the same level as this division, we are not so certain.

Dr. Stejneger's classical terms are mostly so far more correct than those of the general run of his brother ornithologists that he will excuse us for pointing out that the plural of ὀδoûς, a tooth, is not "odontoi," nor that of "scutellum" "scutellæ"! As regards our friend Prof. Newton's well-known claim in favour of the Crow as the most "unchallenged chief" of the class of birds, Dr. Stejneger well shows (pp. 482, 483) that the Corvine tarsus is "very low indeed"; and he might have added that the structure of the Crow's wing is likewise incompatible with so high a rank. We agree with Dr. Stejneger that the most highly developed bird is a nine-primaried Oscine, but are not sure that the much-detested Sparrow has not as good claims for this exalted position as Dr. Stejneger's candidates the Hawfinch and the Evening-grosbeak.

Subjoined is a passage from Dr. Stejneger's disquisition on the subject of counting the primaries in the bird's wing, which deserves the serious attention of ornithologists:—

“The fact is, really, that the tenth (first) primary is not absolutely wanting in the ‘nine-primaried’ Passeres, but its size is so extremely reduced as to become quite or nearly invisible in the old birds, the more so since its position is also slightly changed, as it is forced up on the upper surface of the wing. Not so in the young, however. In a very young specimen of the Snow-flake (*Plectrophenax nivalis*), a ‘nine-primaried’ species, now before me, the outermost (tenth) primary is plainly visible in its natural position, and with the corresponding great covert in its proper place; that is, in the interval between the ultimate and penultimate primaries. From this it will be easily perceived how perverse is the method of counting the primaries from the edge of the wing, since, in nine-primaried birds, the feather which is usually called the first, in reality corresponds to the second of the ten-primaried species. By counting from the secondaries, no difficulty is experienced.”

64. *Lawrence on two new Birds from Yucatan.*

[Characters of two supposed new Species of Birds from Yucatan. By George N. Lawrence. Ann. N. Y. Acad. Sci. vol. iii. no. 9, p. 273.]

On specimens transmitted from Yucatan by Mr. Gaumer, Mr. Lawrence has based two new species, *Polioptila albiventris* and *Chætura gaumeri*.

65. *Lwoff on the Histology of Feathers.*

[Beiträge zur Histologie des Haares, der Borste, des Stachels und der Feder. Von W. Lwoff. Bull. Soc. Imp. Nat. Moscou, 1884, p. 1, taf. v.-viii.]

This is a German translation of a memoir originally published in 1883 in Russian. It treats of the minute structure of hair and feathers, and is illustrated by four plates.

66. *Macpherson and Duckworth on the Birds of Cumberland.*

[The Birds of Cumberland critically studied, including some notes on the Birds of Westmoreland. By the Rev. H. A. Macpherson, M.A., and William Duckworth. Carlisle: 1886. 8vo.]

This work forms a natural complement to Mr. Mitchell's

'Birds of Lancashire,' already favourably noticed in these pages, and it would be hard to say which is the better of the two. Both of the authors of the present work are excellent field-naturalists, and have received ample assistance from numerous collaborators of the same stamp. The total number of the species recorded is 250, of which 84 are residents, 81 periodical visitants, and 85 are of irregular and accidental occurrence. A strong feature is the care with which their distribution is treated; and many British ornithologists will learn with surprise that the only satisfactory case of the occurrence of the Nuthatch in Cumberland dates back to May 1782, when Heysham received one of a pair from Armathwaite. The Siskin has been found to be a regular breeder in some parts of the county during the last few years; but the Twite has, for some unknown reason, decreased. The Raven is stated to be nearly as abundant as it was half a century ago; but game-preservers will feel satisfaction at hearing that the Hooded Crow is only a scarce and winter visitant to Cumberland. For descriptions of birds in their breeding-haunts, attention may be especially directed to the account of the Pied Flycatcher (p. 31) and of the Dotterel (p. 133) by Mr. Frank Nicholson; while lovers of remarkable facts will be interested in the record of the Lesser Redpoll's nest built entirely of cotton-waste close to the Caledonian railway engine-shed. We had long been aware that the telegraph-wires exercised an appreciably fatal influence upon many species, especially game-birds; but it is sad to learn that the Tawny Owl, from its habit of mousing on railway lines, is often felled by locomotives. A few clerical errors can be corrected in a later edition, and it would be more consistent with the present custom if capitals were omitted in the specific names. A map adds to the usefulness of this excellent volume, which is further embellished by a coloured plate of the Dotterel by Keulemans.

67. *Meyer's Illustrations of Birds' Skeletons.*

[Abbildungen von Vogel-Skeletten. Herausgegeben von Dr. A. B.

Meyer. Lief. i. (1879), ii., iii. (1881-82), iv., v. (1883), vi., vii. (1884), viii., ix. (1885), 4to. Dresden: 1879-85.]

Much too little attention, there can be no doubt, has as yet been paid to the study of the osseous framework of the class of birds, and Dr. Meyer's 'Illustrations,' which have now reached their ninth number, and contain already not less than 90 plates, will be much valued by naturalists. It may, however, be remarked that, as a general rule, figures of individual bones are of greater assistance to the working ornithologist than those of the whole skeleton, in which, especially when they are prepared from photographs as in the present case, there is sometimes an indistinctness about some particular point that one is wishing to investigate.

Dr. Meyer's plates are not arranged in systematic order, but we trust that at the close of the work a systematic list will be given, which will greatly increase their usefulness. We must also say that the letterpress which accompanies the plates is rather meagre. It consists mainly of the results of measurements, which are of little value in classification. A general disquisition on the osteology of birds with references to the individual figures should certainly form a portion of a work of this character.

68. '*Mittheilungen*' of the Ornithological Union of Vienna.

[*Mittheilungen des ornithologischen Vereines in Wien*. Section für Vogelkunde, Jahr. 9, no. 29-30; Jahr. 10, no. 1-5, 1885-86.]

Amongst many articles of interest in the recent numbers of this periodical is Hodek's account of his collecting-expedition on the Lower Danube, during which a specimen was obtained of a Pelican "new to Europe." Of this curious bird a lengthened description is given (Jahrg. 10, no. 2, pp. 13, 14). It is stated that Herr v. Pelzeln is inclined to refer the specimen to *Pelecanus rufescens*. But if we understand Herr v. Hodek's account of the termination of the feathered space at the base of bill correctly, the "anonymus" must belong to the group allied to *P. onocrotalus*, and perhaps be an abnormal variety of that species. Selater has long suspected that *P. sharpii* of Bocage (cf. P. Z. S. 1871, p. 632) may be merely a "hepatic" form of *P. onocro-*

talus. Is not Herr Hodek's Pelican a somewhat similar bird?

69. *Oustalet on new Birds from New Guinea.*

[Note sur un Perroquet et sur un Goura de la côte septentrionale de la Nouvelle Guinée, par M. E. Oustalet. Ann. Sc. Nat. sér. 6, Zool. xix. art. 3 (1885).]

The specimens described are from the collection made by M. Laglaize on the north coast of New Guinea. The Parrot is named *Cyclopsittacus edwardsi*; the Pigeon *Goura victoriae* var. *comata*.

70. *Random Notes on Natural History.*

[Random Notes on Natural History. Providence, R. I. Vol. iii. no. 2.]

This appears to be a popular Magazine of Natural History published at Providence, Rhode Island, U. S. A., which occasionally contains ornithological articles.

71. *Report on the Dresden Museum of Art and Science.*

[Bericht über die Verwaltung der königlichen Sammlungen für Kunst und Wissenschaft zu Dresden in den Jahren 1882 und 1883. Dresden: 1885.]

The excellent arrangements of the Royal Museum of Art and Science at Dresden are known to all the world. Our valued correspondent Dr. A. B. Meyer has the direction of the Zoological, Anthropological, and Ethnographical Museum, to the Ornithological Section of which 398 specimens were added in 1882, and 241 in 1883. Amongst these is specially noticed the skin and skeleton of *Notornis mantelli*, presented by Herr O. Lobel, of which Dr. Meyer has already published particulars (*cf.* Ibis, 1882, p. 607).

72. *Report on the Observing-stations of German Birds.*

[Jahresbericht (1883) des Ausschusses für Beobachtungsstationen der Vögel Deutschlands. J. f. O. 1885, p. 225.]

The eighth report of the Committee appointed to collect statistics on the Birds of Germany occupies over 100 pages of the 'Journal für Ornithologie.' It has been prepared

by Dr. R. Blasius, J. Rohweder, R. Tancreé, and A. Walter, all names well known in connection with German ornithology. Thirty-four observers in nine different parts of the Empire have contributed their observations, which have been worked up together by the reporters, and arranged in systematic order. They relate to 216 different species. The most noticeable general results are summarized in some introductory remarks.

73. *Schalow's Essay on the Touracoos.*

[Die Musophagidæ. Monographische Studien von Herman Schalow. J. f. O. 1886, p. 1.]

The Berlin Museum contains examples of all the twenty-five known members of the family Musophagidæ, and most of the recently discovered species have been made known to us by the enterprise of German explorers. It was therefore quite proper that the task of a revision of this interesting Ethiopian group should be undertaken by a German ornithologist. Schlegel and Westerman's huge Monograph of 1860 is the last published general work on the subject.

After some preliminary observations Mr. Schalow gives a *résumé* of former views as to the position of the family in the system, and a list of the principal publications on the subject. In his key to the genera, after separating *Musophaga*, which is at once distinguished by the peculiar form of the bill, the remaining Touracoos are separated into five genera, *Corythaix*, *Gallirex*, *Corythæola*, *Schizorhis*, and *Gymnoschizorhis*, the last mentioned being a new genus distinguished from *Schizorhis* by its face being bared of feathers. The species are then taken in systematic order one after the other, and all particulars as to their form, colour, synonymy, range, and habits are succinctly stated. A list is given under each species of the specimens in the Berlin Museum, with exact localities. The heads of five species are represented in a coloured plate. Altogether we consider this an excellent and very useful piece of work.

74. *Sclater on the Cœrebidæ, Tanagridæ, and Icteridæ.*

[Catalogue of the Passeriformes, or Perching Birds, in the Collection of the British Museum. Fringilliformes: Part II., containing the Families Cœrebidæ, Tanagridæ, and Icteridæ. By Philip Lutley Sclater. London: 1886. 431 pp., 18 coloured plates.]

The eleventh volume of the British Museum Catalogue of Birds is devoted to the Cœrebidæ, Tanagridæ, and Icteridæ.

The species of Cœrebidæ recognized are 70. Of these 63 are represented in the Collection by 672 specimens, 15 of which are types. Thus only 7 species of Cœrebidæ have no representatives in the National Collection.

The Tanagridæ are a much more numerous family, no less than 377 species being acknowledged as valid in the present volume. Only 20 of this number have no representatives in the Collection. The remaining 357 are very fully represented by 3413 specimens, of which 74 are actual types or typical specimens.

Of the remaining family, Icteridæ, the number of valid species accepted in the present work is 128. Of these 3 only are unrepresented in the National series, while the remaining 125 species are well represented by a fine series of 1409 specimens, amongst which are 12 types of species.

Putting the three families together, it will be found that the total number of species treated of in the present volume is 575, represented in the British Museum Collection by 5494 specimens, referable to 545 species, leaving only 30 species deficient to the Collection, whilst the series of specimens are in most cases very extensive, and serve admirably to show the geographical distribution of each species.

The subjoined list may be useful, as showing the progress made with this important work:—

			Species known.	Species in B. M.	Speci- mens.
I. 1874.	Accipitres.	R. B. Sharpe.	377	326	2466
II. 1875.	Striges.	R. B. Sharpe.	190	153	1090
III. 1877.	Coliormorphæ.	R. B. Sharpe.	367	315	2014
IV. 1879.	Cichlomorphæ, pt. i.	R. B. Sharpe.	539	443	2520
V. 1881.	Cichlomorphæ, pt. ii.	H. Seebohm.	344	303	2560
VI. 1881.	Cichlomorphæ, pt. iii.	R. B. Sharpe.	407	315	1508
VII. 1883.	Cichlomorphæ, pt. iv.	R. B. Sharpe.	687	548	3942

Carried forward 2911 2403 16,100

				Species known.	Species in B. M.	Speci- mens.
Brought forward				2911	2403	16,100
VIII. 1883.	{ Cichlomorphæ, pt. v., and Certhiomorphæ. }	Hans Gadow.	402	337	2944	
IX. 1884.	Cinnyriomorphæ.	Hans Gadow.	355	291	2450	
X. 1885.	Fringilliformes.	R. B. Sharpe.	448	396	4590	
XI. 1886.	Fringilliformes.	P. L. Sclater.	575	545	5494	
				4691	3972	31,578

Assuming the number of known species of Birds to be about 11,000, and the same ratio of species to a volume to be maintained, it will require at least 15 more volumes to complete the work. Of these Mr. Sharpe is, we believe, hard at work at two (vols. xii. and xiii.) to contain the Fringillidæ, Ploceidæ, Sturnidæ, and Alaudidæ. Sclater has undertaken another volume (Tyrannidæ and Cotingidæ).

75. *Shufeldt on the Skeleton of Geococcyx.*

[The Skeleton in *Geococcyx*. By R. W. Shufeldt. Journ. Anat. & Phys. 1886, p. 244, pls. vii.-ix.]

Dr. Shufeldt describes the skeleton of *Geococcyx californianus* in his usual thorough and accurate style, and illustrates its various bones in three excellently drawn plates. We hear with concern that this fine species is now becoming rare in localities where it was formerly abundant, owing to the great demand on the part of collectors for the "Road-runner."

76. *Vorderman on the Birds of Mount Salak.*

[Bijdrage tot de Kennis der Avifauna van den Berg Salak (West-Java) door A. G. Vorderman. Natuurk. Tijdschr. v. Nederl. Ind. Deel xlv. Af. 3.]

Mount Salak is one of the extinct volcanoes of Western Java, which attains a height of some 6700 feet. Mr. Vorderman's researches have made him acquainted with 151 species of birds inhabiting this mountain at various elevations. Of these he gives us a list with many remarks. One species, *Brachypteryx salaccensis*, is described as new. The species met with in the highest zone were the rare *Scolopax saturata*, *Psaltia exilis*, *Æthopyga eximia*, *Garrulax rufifrons*, and *Ptilopus porphyreus*.